MEMORANDUM

DATE:

11/24/2008

TO:

FLAGSTAFF CITY COUNCIL

CC:

KEVIN BURKE, CITY MANAGER

FROM:

MAYOR SARA PRESLER, CITY OF FLAGSTAFF



RE:

BIKE HELMET ORDINANCE

I propose that all children under the age of eighteen (18) be required to wear helmets in the City of Flagstaff when operating or riding on a bicycle. I am writing to ask for your support. Please direct the City Manager to place this item on a Regular Agenda for the first meeting in February. The proposed ordinance is attached, along with supporting documents.

Community Support:

Many citizens have joined me in this proposal, and some of their initial letters of support are attached. Recently, I proposed the idea at a Boy Scout meeting at Thomas Elementary School. Parents and children cheered upon the announcement. Our own Flagstaff Fire Department, in collaboration with Safe Kids, does presentations in our schools about the need to wear helmets for safety. I watched their FFD Clown show today at Christensen Elementary School. The children cheered when the FFD Clowns encouraged them to wear their helmets. I met with a downtown bike store owner, representatives from the Flagstaff Biking Organization, City Staff, and Safe Kids. I have met with some individuals from City Boards and Commissions. I talked with local law enforcement officers, who attended the stakeholder meeting and provided feedback about how to successfully implement the program. I met with a Mom's Club of about 40 local moms. One participant encouraged the enforcement to provide ice cream certificates when children were wearing their helmets. Through both positive and punitive enforcement the program would be most successful. I strongly encourage you to consider adopting this ordinance. I have asked most supporters to please wait until the Council has had an opportunity to place the item on a Regular Agenda for full public comment. The community is excited about this important initiative to protect our children and improve overall public safety.

Highlights:

- 1. All children under eighteen (18) will be required to wear a helmet.
- 2. Safe Kids and FBO will provide free or significantly reduced helmets to children (approximate cost per child is around \$8). The City will not provide helmets.
- 3. The first citation/violation may be waived, in the Judge's discretion, if a helmet or a receipt for a helmet is shown. Subsequent violations carry a \$50 fine.
- 4. Public education could be conducted by Safe Kids, FBO, Flagstaff Fire Department, and citizen volunteers. An existing program reaches into every local elementary school and educates children about bicycle safety. Volunteers will conduct these sessions. I will personally commit to participate in the public education component of this ordinance.

Modifications and Considerations:

When the ordinance was initially proposed, it mirrored other communities. After meeting with community stakeholders, I tried to draft language that would be a fit for Flagstaff. For example, rather than requiring business owners to provide notice upon purchase of a bicycle, our community stakeholders and business owners asked that this be optional or encouraged. I did so. Another example is the language that limits the waiver of the fine to the first citation only. Some communities across the United States have passed similar ordinances and found that incentives and waivers are essential to good ordinances. I have incorporated their suggestions. A final example is regarding children in tow trailers. I learned from business owners that many of these trailers provide adequate safety in themselves, or that helmets are not made to fit all children under the age of one (1). In response to this and in conjunction with my research, I drafted an exemption to children under the age of one (1) that are riding in a trailer.

Next Steps:

In Arizona, Pima County (1995), Sierra Vista (1995), Tucson (1993) and Yuma (1997) all have ordinances requiring helmets for children under 18. Flagstaff, as a walking and biking community, should join other Arizona communities in these efforts to protect our children and decrease head injuries and other accident related injuries and fatalities. Staff representative, Martin Ince, is prepared to provide more detailed research if the Council chooses to place this item on a Regular Agenda. The language in the proposed ordinance would likely require Legal Staff to perform minimal formatting and language changes, as it mirrors other Arizona communities, with some minor modifications. Implementation and public education would be conducted by community volunteers, thus minimizing staff time. Cost would be minimal and community benefit would be great. Please direct the City Manager to place this item on the Regular Agenda for the first meeting in February. If an earlier time is desired, Council may direct the City Manager. This proposed time frame will allow staff to prepare the ordinance and accept public comment, the community to begin public education and resource identification, and the Council to conduct the appropriate outreach and citizen conversations. Thank you for your consideration.

ATTACHMENTS



friends of Flagstaff's Future November 25, 2008

Mayor Sara Presler

211 W. Aspen

Cynthia White

Executive Director

Flagstaff, AZ 86001

Corrie Griffith Membership Coordinator

Board of Directors

Shelley Silbert President

Amanda Dominguez

Eva Hatchner Secretary/Treasurer

James E. Babbitt

Tish Bogan-Ozmun

Rom Coles

Debbie Leavitt

Deb Linda

Tamara Ramirez

Miguel Vasquez

Marilyn Weissman

Dear Mayor Presler,

On behalf of Friends of Flagstaff's Future, I would like to express our support for an ordinance that requires children under the age of eighteen to wear a bicycle helmet whiling riding on their bicycles. We believe in the importance of safety of our children so they can have a successful and productive future. This is an important cause for our organization because we promote bicycling as a viable means of transportation. To increase the likelihood of bicycling as a primary means of commuting in our community, we need to ensure that it is both accessible and safe for cyclists. By implementing a policy that clearly increases the safety for cyclists, bicycling will foster and grow. There have been a number of tragic accidents in Flagstaff in large part due to a lack of regard for safety. We support any measure that can improve the statistics surrounding safety in our community. This clearly ties in with our value of a quality of life for residents. Studies indicate that there are many permanent brain injuries that can be prevented through the simple measure of wearing protective gear. We support our fellow organization, Flagstaff Biking Organization in its effort to educate the public about the importance of proper helmet protection. We gladly support your efforts to continue to care about the future of Flagstaff by supporting our community's children through an ordinance that proposes the enforcement of helmet protection for cyclist under 18.

If you should need further support or have any questions, please do not hesitate to contact me at 556-8663 or Cynthia@friendsofflagstaff.org. Thank you for caring about our citizens.

Sincerely.

Cynthia White

Cynthia White

PO Box 23462 Flagstaff, AZ 86002 (928) 556-8663 info@FriendsofFlagstaff.org www.FriendsofFlagstaff.org



MANDATORY BICYCLE HELMET REQUIREMENT FOR CHILDREN

- A. No person under eighteen (18) years of age shall ride a bicycle or be a passenger on a bicycle, ride in a restraining seat attached to a bicycle, or ride in a trailer towed by a bicycle unless that person is wearing a properly fitted and fastened bicycle helmet which meets the current standards for protective headgear as specified below in Section B. Children under one (1) year of age riding in a trailer towed by a bicycle shall be exempt.
- B. A bicycle helmet shall meet or exceed the current minimum bicycle helmet safety standards set by the US Consumer Product Safety Commission (CPSC), the American National Standards Institute (ANSI), the American Society for Testing and Materials (ASTM), or the Snell Memorial Foundation.

RENTED OR LEASED BICYCLES

It shall be unlawful for any person to rent or lease any bicycle to or for the use of a person under the age of eighteen (18) years unless:

- C. The person is in possession of a protective helmet meeting the standards set out above in Section B at the time of such rental or lease; or
- D. The rental or lease includes a protective bicycle helmet meeting the standards set out above in Section B and the person agrees to wear the helmet at all times while operating or riding as a passenger on the bicycle.

PENALTY; WAIVER

- E. Any person in violation of this chapter shall be found guilty of a civil infraction and be required to pay a minimum fine of fifty dollars (\$50.00) which cannot be suspended except pursuant to Section F.
- F. The penalty provided in this section for a violation this chapter may be waived upon the first citation only if an offender presents suitable proof that an approved helmet has been purchased or otherwise obtained since the time of the violation and that the minor uses or intends to use said helmet whenever required to do so by this chapter. Waiver of the fine is at the discretion of the Court.

Traffie Safety Facts

www.nhtsa.go

Laws

DOT HS 810 886W

January 2008

Bicycle Helmet Use Laws

Background

The National Highway Traffic Safety Administration supports the enactment of bicycle helmet use laws. Bicycle helmets offer bicyclists the best protection from head injuries resulting from bicycle crashes, and bicycle helmet laws have proved effective in increasing bicycle helmet use.

Key Facts

- More than 51,000 bicyclists have died in traffic crashes in the United States since 1932, the first year that bicycle fatality estimates were recorded.
- In 2006, 773 bicyclists were killed and an additional 44,000 were injured in traffic crashes. Children 14 and younger accounted for 98 of those fatalities (13%), making this one of the most frequent causes of injury related death for young children.
 - Inside This Issue
 - Background
 - Key Facts
 - Legislative Status
 - Cost Savings
 - References

- In 2006, of those cyclists killed, 13 percent were 15 to 24 years old; 12 percent were 25 to 34 years old; 36 percent were 35 to 54 years old; and 25 percent were 55 and older.
- In 2006, the average age of bicyclists killed in motor vehicle crashes was 41, and the average age of those injured was 30.
- In 2006, 88 percent of bicyclists killed and 82 percent of those injured were males. In 2005, an estimated 494,712 of all bicyclerelated injuries were treated in U.S. hospital emergency rooms. Approximately 53 percent of these were under the age of 15.
- In 2006, 25 percent of injured bicyclists were 15 to 24 years old; 12 percent were between the ages of 25 and 34; 23 percent were between the ages of 35 and 54; and 13 percent were 55 and older.
- Bicycle helmets are 85- to 88percent effective in mitigating head and brain injuries, making the use of helmets the single most effective way to reduce head injuries and fatalities resulting from bicycle crashes.
- Despite the fact that nearly 70 percent of all fatal bicycle crashes involve head injuries,

- only about 20 to 25 percent of all bicyclists wear bicycle helmets.
- Universal bicycle helmet use by children 4 to 15 would prevent 39,000 to 45,000 head injuries, and 18,000 to 55,000 scalp and face injuries annually.
- As with seat belts, child safety seats, and motorcycle helmets, enacting laws requiring the use of bicycle helmets, along with education and high-visibility enforcement, is likely to be the most promising way to increase bicycle helmet use.

Legislative Status

- The first bicycle helmet law was passed in California in 1986 and became effective in 1987. This law was amended in 1994 to cover everyone under 18.
- To date, 21 States, the District of Columbia, and at least 149 municipal localities have enacted age specific bicycle helmet laws. Most of these laws cover bicyclists under 16.
- Fourteen States have no State or local helmet laws at all (Arkansas, Colorado, Idaho, Indiana, Iowa, Minnesota, Mississippi, Nebraska, North Dakota, South Dakota, South Carolina, Utah, Vermont, and Wyoming).



- The Child Safety Protection Act of 1994 (Public Law 103-267), required the Consumer Product Safety Commission (CPSC) to develop a mandatory bicycle helmet standard.
- On March 10, 1998, the CPSC published a final rule establishing 16 CFR Part 1203, Safety Standard for Bicycle Helmets, which applies to bicycle helmets manufactured after March 10, 1999. The interim mandatory standard that went into effect on March 17, 1995, continues to apply to helmets manufactured between March 17, 1995, and March 10, 1999. The standard mandates several performance requirements including:
 - ▲ Impact protection in a crash: The standard establishes a performance test to ensure that helmets adequately protect the head in a collision or a fall:
 - ▲ Children's helmets and head coverage: The standard specifies an increased area of head coverage for children age 1 to 5;
 - Chinstrap strength: The standard establishes a performance test to measure chinstrap strength to prevent breakage or excessive elongation of the strap during a crash;
 - Helmet Stability: The standard specifies a test procedure and requirement for a helmet rolling off a head during a collision or fall; and

Peripheral Vision: The standard requires that a helmet allow a field of vision of 105 degrees to both the left and right of straight ahead.

In addition, helmets meeting the standard must have labels indicating that they comply with CPSC requirements.

Cost Savings

- The estimated annual cost of bicycle related injuries and deaths (for all ages) is \$8 billion.
- Bicycle related head injuries are expensive because these injuries can endure and may require treatment for a lifetime.
- Every dollar spent on bicycle helmets saves society \$30 in indirect medical costs and other costs.

References

Bicycle Helmet Safety Institute (2006). Helmet Laws for Bicycle Riders: A Summary. BHSI, Retrieved from the Internet at www. helmets.org.

Foss, R., & Beirness, D. (2000). Bicycle Helmet Use in British Columbia: Effects of the Helmet Use Law. Chapel Hill, NC: University of North Carolina.

Bicycle Helmet Safety Institute (2005). Helmet Laws for Bicycle Riders. Retrieved from the Internet at http://helmets.org/mandator.htm on December 31, 2005.

NHTSA (2001). Resource Guide on Laws Related to Pedestrian and Bicycle Safety. (DOT HS 809 368). Washington, DC: National Highway Traffic Safety Administration.

NHTSA (2004). Bicycle Helmet Use Laws: Lessons Learned from Selected Sites. Retrieved from the Internet at http://www.nhtsa.doi...gov/people/injury/pedbimot/bike/BikeHelmetUseLawsWeb/pages.

NHTSA (2005). Traffic Safety
Facts: Bicyclists and Other Cyclists
Fact Sheet – 2005 Data, National
Center for Statistics and Analysis.
DOT HS 810 617. Washington, DC:
National Highway Traffic Safety
Administration.

NHTSA (2006). Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices. DOT HS 809 980. Washington, DC: National Highway Traffic Safety Administration.

Safe Kids Worldwide. *Bike Injury: The Facts.* (2005). Retrieved from the Internet at www.safekids.org, on October 30, 2005.

U.S. Consumer Product Safety
Commission (2005). Product
Summary Report, All Products.
Injury Estimates for Calendar year
2005. National Electronic Injury
Surveillance System, National
Injury Information Clearinghouse.
State Bicycle Helmet Laws:
Summary.* Washington, DC:
U.S. Consumer Product Safety
Commission.

Jurisdiction	Age	Jurisdiction	Age
Alabama	Under 16	Massachusetts	Under 17
California	Under 18	New Hampshire	Under 16
Connecticut	Under 16	New Jersey	Under 17
Delaware	Under 16	New Mexico	Under 18
District of Columbia	Under 16	New York	Under 14
Florida	Under 16	North Carolina	Under 16
Georgia	Under 16	Oregon	Under 16
Hawaii	Under 16	Pennsylvania	· Under 12
Louisiana	Under 12	Rhode Island	Under 16
Maine	Under 16	Tennessee	Under 16
Maryland	Under 16	West Virginia	Under 15

Source: Bicycle Helmet Safety Institute (BHSI)

U.S. Department of Transportation National Highway Traffic Safety Administration



The reports and additional information are available from your State Highway Safety Office the NHTSA Regional Office serving your State: NHTSA Headquarters. Office of Safety Programs. ATTN NTI-121, 1200 New Jersey Avenue SE. Washington, DC 20590; 202, 366, 2683, or NHTSA's Web site at www.nhtsa.gov.

^{*}Check with your State Bicycle Pedestrian Coordinators for county, city and local bicycle helmet laws.

As a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Jack Welch 2600 E 7TH FLA6 86004 714 0504

As a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

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Thanks,

Stelley Joele 9015. O'Leary St. #48 Flagstaff, AZ 86001

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Thanks,

Climan

Km Aush CCHD Safe Rontes to School Coordinator 2625 N. Kmg St. Fragstaff, Az 86004

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Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Slidi Noving-Blackgoat Heidi Young-Blackgoat 1936 W. Camelof Drive

As an Office Coordinator for the Emergency Department at Flagstaff Medical Center and a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

I have seen too many young people come into the Emergency Room and Trauma Unit presenting preventable injuries.

Even tough it is the responsibility of parents to help protect children against unintentional injuries a Flagstaff city ordinance would focus attention on the need to protect children.

Thank you for your time and consideration,

Patti Pierce

Emergency Department Office Coordinator

Flagstaff Medical Center

11/20/08

City of Flagstaff, Bike Helmet Ordinance

As a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Thanks,

Sigtte Melis 112 N. Astec St. Flagstyf, AZ 86001

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Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Thanks,

Trady Denet 2704 N. East St Flagstaff, AZ 86001

As a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Thanks,

Loga Bounds 1804 w. Heavenly Ct.

Flagstaff, AZ 86001

As a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Corroles
1472 University Hts Dr. W.
Flag stabb Arizona 86001

16

As a trauma nurse at Flagstaff Medical Center, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

I have seen too many young people come into the Emergency Room and Trauma Unit presenting with preventable injuries. The eventual cost to the community in healthcare costs, productivity, and grief is too high. It is our responsibility to do everything in our power to protect our children.

Unintentional injury is the **leading cause of death** in children. A Flagstaff city ordinance would bring a much needed focus to the prevention of injuries. It is much less expensive and easier to prevent injuries from occurring in the first place than it is to treat them after they've occurred.

Thank you for your time and consideration,

Shawn Bowker RN, CEN, CFRN

Ouality Assurance and Injury Prevention Coordinator

Mund Souker RDCEN CFRD

Trauma Services

Flagstaff Medical Center

Safe Kids, Coconino County, Vice President

As a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Thanks,

Imanda Guay

Flag AZ 86001

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Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Thanks,

Thea Harbin 2901 N. Tindle Blvd. Flagstaff, AZ 86004

As a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Thanks,

926 Chneloter Pag-Aar

As a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

Even tough it is the responsibility of parents to help protect children against unintentional injuries, a Flagstaff city ordinance would focus attention on the need to protect children. Thank you for your time and consideration,

Thanks,

Jorja Nackard 606 N. Locust Flag, Az. 86001

Karen Caravona - Constituent call in support of bike helmet ord

From:

Karen Caravona

To:

Council, City

Date:

12/9/2008 3:20 PM

Subject: Constituent call in support of bike helmet ord

Stephanie Wiley, 773.2113, is an RN and called in today to voice her support of the bike helmet ordinance for children. Although she believes that parents are ultimately responsible for making kids wear helmets, Wiley says that in her experience the ordinance is justified due to:

- the potential loss of functioning to children who get head injuries
- the cost of medical treatment due to head injury
- that helmets can be cheaply obtained for kids from many source

Her e-mail is whwaz@yahoo.com

Karen Voyer-Caravona **Executive Administrative Assistant** Mayor and City Council (928) 779-7600



From:

"Nancy Hagerman" <nancy.hagerman@nahealth.com>

To:

<spresler@ci.flagstaff.az.us>

Date:

12/9/2008 2:22 PM

Subject:

Bicycle Ordinance, Helmets for riders under 18 years of age

I am a Certified Emergency Nurse and active RN who works in the Emergency Department at Flagstaff Medical Center. My comments do not reflect the opinion of Flagstaff Medical Center. My comments reflect my 14 years of experience as a Burn Care RN (Las Vegas, NV), Emergency Department and Pediatric Emergency Department RN, and former 6 year flight RN.

Head/brain injuries from bicycle crashes and collisions are devastating and often lead to life long, neurological injuries which render the patient incapable of full functioning as a human being. Neurological injuries are devastating, and often permanent, where skin, bone and non-critical organ injuries can often be successfully treated. Non helmeted bicycle riders involved in crashes and collisions often suffer traumatic brain injuries, as well as other injuries, since bicycle riders share the roads with larger more powerful vehicles. Flagstaff's bicycle injuries follow national statistics. As a community we can send a message of community care and support to the health and well being of our children. I support the requirements of bicycle helmets as the law for persons under 18 years of age. Parents of minors found to be without helmets could be "cited" into an educational program and assisted with obtaining an appropriately sized helmet. Bell helmets has an extremely generous discount helmet purchasing program. Coconino County SafeKids Coalition and Flagstaff Biking is actively involved in helmet and bicycle education programs for children, and could be brought in to be active participants.

Sincerely, Nancy Hagerman, RN, BSN, CEN

December 8, 2008

City of Flagstaff, Bike Helmet Ordinance Honorable Mayor Sara Presler Dear Mayor,

As a trauma nurse at Flagstaff Medical Center and a Flagstaff citizen, I write this letter supporting the creation and adoption of a Flagstaff city ordinance requiring children under the age of 18 to wear a helmet while riding a bicycle.

As a trauma critical care nurse, flight nurse and trauma manager for the past 23 years I have personally witnessed both situations where bike helmets have saved lives and prevented debilitating brain injuries. I have also witnessed the tragic consequences where preventable injuries were worsened because protective (helmet) equipment was not in place. Young people come into the Emergency Department and Trauma Unit weekly with preventable head injuries ranging from concussions to fatal brain hemorrhages.

Although it is the responsibility of parents and guardians to protect children against unintentional injuries; a Flagstaff city ordinance would help the parents and community focus attention on the need and make it a priority to protect children from unintentional preventable injury.

Injury prevention programs are the most effective when they have all three individual and community motivators in place: City ordnances and law enforcement, awareness of the risk and potential of injury and availability of injury prevention equipment.

- 1) Appropriate legal enforcement i.e.: City Ordnance to bolster parental supervision.
- 2) Community awareness of associated **risk of injury** Helmets reduce head injuries by 75%. (Emergency department & Trauma Center press releases, SafeKids activities, bike route and lanes, bike rodeos, State and Local Static's http://azdhs.gov/bems/traumapdf/HELMETYOURHEAD.pdf)
- 3) Availability of low cost **injury prevention equipment** helmets available through http://flagstaffbiking.org/kids-programs/safe-kids/

Thank you for your time and consideration of this important community child safety initiative.

Bill Ashland, RN

Trauma Program Manager Trauma Services Flagstaff Medical Center Office (928) 773-2457 Pager (928) 556-6234 Fax (928) 773-2461 bill.ashland@nahealth.com



Anthony Quintile Absolute Bikes 202 E. Route 66 Flagstaff, AZ 86001 (928) 779-5969

December 9, 2008

Mayor Sarah Pressler and Flagstaff City Council City Hall Flagstaff, AZ 86001

Honorable Mayor and City Council-

I am writing to express my support of the mandatory bicycle helmet law for children under 18 years of age.

I am one of the principle organizers of the SAFE KIDS/ Flagstaff Biking Organization bicycle safety rodeos and helmet program.

As part of the presentation and clinic I do for children in the schools and at other public events throughout the year, I informally poll kids on how many own helmets and wear them when they ride their bikes. I am often astounded at how few even own helmets, let alone how few are encouraged to wear them while riding.

I believe that a mandatory helmet law for kids would at a bear minimum raise awareness amongst parents and kids as to the importance of this inexpensive, simple step towards preventing serious injury and potentially death from what might otherwise be a minor accident. An enforceable law is often the best way to get kids to act in a more responsible manner than they might otherwise when outside of the oversight of their parents.

As an individual who has broken a bicycle helmet with his head in a traffic accident, I can personally attest to their value. Had I not been wearing a helmet at the time of this accident, I do not believe I would still be capable of writing this letter.

Thank you for your consideration-

Anthony Quintile

General Manager

Absolute Bikes, Flagstaff

928-779-5969

December 9, 2008

Flagstaff City Council

Dear Flagstaff City Council Members,

We are writing this letter in support of proposed Bicycle Helmet legislation for the city of Flagstaff. It is our opinion and the opinion of the American Academy of Pediatrics that bicycle helmets are very effective devices that can prevent up to 88% of serious brain injuries (Pediatrics, Vol 108 No. 4). Despite the strong evidence of the effectiveness of bicycle helmets, studies had shown that only 25% of children age 5-14 usually wear a helmet (Pediatrics, Vol 108 No. 4). Two factors strongly associated with bicycle helmet use by young children are: Helmet use by an accompanying parent, and state or local mandatory helmet use law.

Therefore, it is our position that a law mandating the use of helmets by all persons under the age of 18 would be a major step in the prevention of severe injury in the children of our community.

Respectfully,

Alice Berger, MD

Head of Pediatrics

Flagstaff Medical Center

Robert Berger, MD

Trauma Services Medical Director

Flagstaff Medical Center

Andrew Aldridge, MD

Trauma Services Medical Director

Flagstaff Medical Center

AMERICAN ACADEMY OF PEDIATRICS

Committee on Injury and Poison Prevention

Bicycle Helmets

ABSTRACT. Bicycling remains one of the most popular recreational sports among children in America and is the leading cause of recreational sports injuries treated in emergency departments. An estimated 29 000 children younger than 21 years sustained head injuries (excluding the face) while bicycling in 1998. The bicycle helmet is a very effective device that can prevent the occurrence of up to 88% of serious brain injuries. Despite this, most children do not wear a helmet each time they ride a bicycle, and adolescents are particularly resistant to helmet use. Recently, a group of national experts and government agencies renowed the call for all bicyclists to wear helmets. This policy statement describes the role of the pediatrician in helping attain universal helmet use among children and teens for each bicycle ride,

ABBREVIATIONS. ANSI, American National Standards Institute; ASTM, American Society for Testing and Materials; CPSC, Consumer Product Safety Commission.

BACKGROUND

icycling continues to be one of the most popular recreational sports in America. An estimated 44.3 million children younger than 21 years ride bicycles in the United States. It is a clean, efficient mode of transportation for children to make short neighborhood trips, and bicycling can be an enjoyable form of aerobic physical activity for children and adolescents.

As with all physical activities, bicycling is not without hazards. Children are at risk of injury from falls resulting from either intrinsic factors, such as exceeding their ability level, or extrinsic factors, such as swerving from or striking a motor vehicle or fixed object. Bicycle-related injuries among children younger than 21 years resulted in approximately 275 deaths2 and an estimated 430 000 visits to emergency departments in 1998.9 Among all recreational sports, bicycling injuries are the leading cause of emergency department visits for children and adolescents. Traumatic brain injury accounts for two thirds of all bicycle-related fatalities.4 An estimated 23 000 children required emergency care after sustaining a traumatic brain injury while bicycling in 1998, accounting for about 5% of all bicycle-related injuries.3

Use of a bicycle helmet can prevent or lessen the severity of brain injury during a bicycle crash. Helmets work by absorbing some of the energy and

dissipating the sharp energy peak of the blow over a larger area for a slightly longer time. A bicycle helmet typically consists of rigid crushable foam covered with a thin layer of plastic. It is held to the head by a retention system (chin strap) composed of flexible straps and hardware. The skull provides another layer of protection and absorbs additional energy. If forces are not extreme and the helmet is intact and worn correctly, the helmet-skull system should protect the brain from injury in most cases.

Correctly placing and securing a helmet on the head is important to maximize protection. Because 4 helmet sizes exist and models fit slightly differently, a child should try on several sizes and models to find the best fit when purchasing a helmet. Correct fit involves positioning the helmet on the head so it sits low on the forchead and is parallel to the ground when the head is held upright (the wearer should be able to see its lower brim when looking all the way up); installing or removing inside pads to make the helmet snug; and adjusting the chin strap so it is comfortably snug (ie, tight with room for only 2 fingers to be inserted between the strap and the chin). When in place with the chin strap secure, the helmet should not come off or shift over the eyes when the wearer tries to shake it loose.

Even when worn properly, a helmet does not offer an unlimited degree of protection, particularly against high-energy crashes. Even in low-impact falls, the helmet may be damaged by the force delivered, rendering it less effective in subsequent impacts. This damage may not be apparent to the eye. Accordingly, any helmet that has sustained a substantial blow should be discarded and replaced, including any helmet involved in a crash in which the head has hit a hard surface or in which a fall has resulted in marks on the shell. Furthermore, helmet integrity does not persist throughout time. Because some helmet materials deteriorate with age, the Snell Memorial Foundation, a nonprofit organization established to test and certify helmet safety, recommends that a helmet be replaced at least every 5 years, or sooner if the manufacturer recommends it.

Wearing a bicycle helmet is one of the most effective safety measures a child can take to prevent injury. The first study of helmet effectiveness indicated that it could prevent 88% of serious brain injuries. In subsequent studies, helmets provented 69% of head injuries and 65% of injuries to the mid and upper face.7 Despite the enormous degree of protection afforded by a bicycle helmet, a 1994 study indicated

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omy of Pediatrics.

that only 25% of children 5 to 14 years of age usually or always wore a helmet while bicycling. In 1999, the percentage of children who reported always using helmets varied among states from 13% to 65%. Reasons usually given for not using a helmet are discomfort (especially heat), perceived lack of importance for casual riding (in contrast to sport or race bicycling), lack of style, or peer pressure. And Cost was seldom cited as an important factor now that helmets are widely available for less than \$20.

Two factors are strongly associated with bicycle helmet use by young children-helmet use by an accompanying parent and a state mandatory helmet use law or local ordinance. In one study, a helmet was worn by 90% of children from a low-income neighborhood and 100% of children from a highincome neighborhood when an accompanying paront wore a helmet. 11 After enactment of a helmet law in Georgia, reported helmet use increased from 35% to 53%, 2 and in Oregon, enactment of a helmet law was associated with a doubling of observed helmet use to 49% among children and youth.13 Presently, 17 states and the District of Columbia have agespecific bicycle helmet laws, usually covering bicyclists younger than 16 years. These laws affect 49% of all US children younger than 15 years. Another 2 states have recently enacted legislation. Such legislation has been shown to be more cost-effective than community-based or school-based interventions14 and is a *Healthy People 2010* objective. 15

Recently, a group of national experts from safety organizations and government agencies called for universal helmet use by all bicyclists, regardless of age. This goal has 3 strategies: 1) creating a national bicycle helmet safety campaign; 2) creating tools to promote helmet use; and 3) assisting states and communities wishing to address helmet use through legislation. 16

Voluntary helmet safety standards have existed for many years, with the American National Standards Institute (ANSI), Snell Memorial Foundation, and American Society for Testing and Materials (ASTM) each establishing their own safety standards based on the ability of a helmet to manage the energy of a drop onto a metal anvil and the strength of the strap system. In 1999, the US Consumer Product Safety Commission (CPSC) issued a mandatory safety standard for bicycle helmets, requiring all helmets manufactured or imported for sale in the United States after March 1999 to comply with this standard.17 Accordingly, parents should look for a sticker documenting CPSC approval on the inside liner of any new helmot purchased. Older helmets cortified by the ASTM and/or the Snell Memorial Foundation may continue to be used, but helmets certified only by the ANSI should be discarded, because they were drop-tested from a height below the current 2 meter standard. Multisport helmets are designed for in-line skating, skatchoarding, bicycling, and other sports. If a multisport helmet is intended or marketed (even by implication) to be used while bicycling, it must be certified to meet the CPSC standard for bicycle helmets.

RECOMMENDATIONS

Helmet Use

- All bicyclists should wear properly fitted bicycle
 or multisport helmets each time they ride. A bicycle helmet or multisport helmet intended for
 bicycle use manufactured after March 1999 must
 have certification that it met the CPSC standard,
 regardless of whether it met the standards of any
 other organization. If a bicycle helmet manufactured before March 1999 meets the standards established by the Snell Memorial Foundation or
 ASTM (but not ANSI alone), it may be used. However, once damaged or outgrown, it should be
 replaced with a new helmet that has been certified
 to meet the CPSC standard.
- 2. Young children who ride as passengers must wear an appropriately sized helmet and be placed securely in a bicycle-mounted child seat or, preferably, a bicycle-towed child trailer. Children should never ride on the handlebars or crossbar.¹⁸ Passengers should be at least 1 year old, by which age most children have sufficient muscle strength to control head movement during a sudden stop, even with the additional weight of a helmet.
- 3. Pediatricians should emphasize that any helmet involved in a crash or otherwise damaged should be discarded and replaced. Otherwise, all helmets should be replaced at least every 5 years, or sconer if the manufacturer recommends it. Purchase of helmets from yard sales should be discouraged, because the age and integrity of the helmet cannot be assured.
- 4. Parents and children should learn all essential aspects of bicycle safety. Helmet use is only I aspect of bicycle safety and does not substitute for the child's knowledge and practice of the rules of the road, sufficient visibility to drivers, and other safety measures.

Advocacy

- Pediatricians should encourage parents and other child care providers to require children to wear a bicycle helmet when they begin riding tricycles or other wheeled vehicles or toys. Pediatricians should inform parents and patients of the importance of wearing a bicycle helmet and the dangers of riding without one. This information is especially important for adolescents, because they are particularly resistant to wearing a helmet.
- Pediatricians should encourage parents to wear a helmet when blcycling to model safe behavior for their children.
- 3. Pediatricians should serve as community and leglistative advocates to encourage state and local governments to enact legislation requiring helmet use by all bicyclists and mandating bicycle rental agencies to include helmets as part of the rental contract. The American Academy of Pediatrics has developed model state legislation titled "Child Bicycle Safety Act."

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- 4. Pediatricians should encourage school districts to make helmet wearing mandatory during bicycle rides to and from school and during school-related bicycle trips.
- 5. Coalitions of physicians, parents, and community leaders should develop and support communitybased and school-based education programs to promote bicycle safety training that emphasizes helmet use. A national initiative to encourage all children to wear a helmet whenever bicycling deserves support.

Retail outlets are urged to carry affordable helmets and include them in the purchase of every new bicycle sold.

- Organizations promoting helmet use are encouraged to provide attractive posters and educational videotapes for retailors and pediatricians to display as well as other materials for parent groups to distribute, emphasizing the safety advantages and attractiveness of protective headgear. All materials should teach how to wear a helmet correctly.
- 8. When bicyclists are shown in the popular media (including television, advertisements, movies, and promotional materials), those responsible are urged to consistently show them wearing a

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REFERENCES

- 1. Rodgers GB. Bicycle and bicycle helmet use patterns in the United States in 1998. J Safety Ros. 2000;31:149-158
- Centers for Disease Control and Prevention, National Center for Health Statistics, 1998 Mintulity Topes Hyattsville, MD: Division of Data Services, National Center for Health Statistics; 2000
- 3. US Consumer Product Safety Commission. National Electronic Injury Surveillance System (NRISS). Berheads, MD: US Consumer Product Safety Commission; 1999
- 4. Centers for Disease Control and Prevention, Inpery-control recommendations: bicycle helmels. MMWR Mark Martal Waly Rep. 1995, 44(KK-1):1-17
- 5. Thempson RS, Rivara FP, Thempson DC, A cost control study of the effectiveness of bleyele safety helmets. N Engl J Med. 1989;320:1361-1367
- 6. Thompson LC, Rivara FP, Thompson RS. Effectiveness of bicycle safety beforets in preventing head pipuries. A case-control study, JAMA 1996; 276.1968--1979
- 7. Thompson DC, Nunn ME, Thompson RS, Rivare FP. Effectiveness of bicycle safety laduats in preventing serious facial injury. [AMA: 1996] 276:1974-1975
- 8. Sacks JJ. Krasmow M. Houston B. Russell J. Dicycle belinet use among American children, 1994. Inj Prev. 1997;2:258-262.
- National Contex for Chronic Disease Prevention and Health Promotion. Rehavioral Risk Factor Surveillance System (RRPSS), Available at: http://www.cdc.gov/nocdphp/brfss. Accessed August 19, 2001
- 10. Howland J. Sargent J. Weitzman M, et al. Berriers to bicycle helanet use among children: results of focut groups with fourth, fifth, and sixth graders. Am | Dis Child. 1989;143:741-744
- 11. Parlán PC, Spence LJ, Hu X, Krauz KH, Shrett LC, Wesson DE, Evaluation of a promotional strategy to increase bicycle helines use by childram. Patientes. 1993;91:772-777
- Schieber KA, Kresnow MJ, Socks JJ, Fledger BJ, CARA JM, Toomey KE. Effect of a state law on reported bicycle belinet ownership and use. Arch Pedintr Adolese Med 1996:150/707-712
- 13. Ni H, Sacks JJ, Curtis L, Cieslak PR, Hedburg K, Evaluation of a statewide bleyele helmet law via multiple measures of helmet use. Arch Pediatr Adolesc Med. 1997;151:59-65
- 14 Hatziandren IJ, Sacks JJ, Brown R, Tayker WR, Rosenberg ML, Graham JD. The cost effectiveness of three programs to increase use of bicycle halmets among children. Public Health Rep. 1995;110:251-259
- 15. US Department of Health and Human Services. Healthy People 2010. Vol. 1 and 2 2nd ed. Washington, DC: US Government Printing Office; 2000
- National Highway Traffic Safety Administration, National Center for Injury Prevention and Control, and Federal Highway Administration. National Strategies for Advancing Bloycle Safety. Washington, DC: US Department of Transportation; 2001
- 17. Safety Standard for Bisycle Helmets. 68 Federal Register 117)1-11747 (1998) (codified at 16 CFR §1203)
- Powell EC, Tanz RR. Tyles and bikes: injuries associated with bicyclelowed child trailers and bicycle-mounted child seats. Arch Pediatr Adolesc Med. 2000;154:851-353
- 19. American Academy of Pediatrics, Child Bicycle Safety Act. Available at: http://www.aap.org/polky/m956.html. Accessed August 19, 2001

BICYCLE HELMETS

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HELMET YOUR CHILD

Bicycle Injuries Among Children in Arizona

2005 FACTS

- * A total of 3,484 children younger than 15 were treated in Arizona hospital emergency department for bicycle-related injuries. Of these emergency department visits, 412 children were treated for head injuries.
- * 178 children younger than 15 were admitted to Arizona hospitals due to bicycle-related injuries. Of these hospitalized children, 51 were treated for head injuries.
- * Four children younger than 15 years of age died from bicycle-related injuries in Arizona.

Effectiveness of Helmet Use

- * Bicycle helmets are about 75 percent effective in mitigating head and brain injuries, making the use of helmets the single most effective way to reduce head injuries and fatalities resulting from bicycle crashes.
- * In Arizona, 31 (61%) out of 51 bicyclerelated head injury hospitalizations and 258 (63%) out of 412 bicyclerelated head injury emergency department visits could have been avoided in 2005 if all bicyclists under 15 years of age had worn helmets.

Economic Burden

- * A study done using 1997 data estimated that if all riders wore helmets, more than \$1 million in direct and \$37 million in indirect health costs could have been avoided in Arizona.
- * In Arizona, emergency department visit charges due to bicycle-related head injury were more than \$800,000 and hospital admission charges totaled more than \$1 million for children younger than 15

WHAT CAN BE DONE?

- Support bicycle helmet legislation: Three Arizona communities have enacted bicycle helmet legislation: Yuma, Sierra Vista and Tucson.
- Start an education program about the need for and importance of bike helmets in community, school, and/or neighborhood.

REFERENCES:

- Schulman J., Sacks J., Provenzano G. State level estimates of the incidence and economic burden of head injuries stemming from non-universal use of bicycle helmets. *Injury Prevention*, 2002;8:47-52.
- 2. National Highway Traffic Safety Administration. Fatality Analysis Reporting System (FARS), 2005.
- 3. The Arizona Department of Health Services. Hospital Discharge Data, 2005 (including AZ residents and non-residents)
- 4. Kopjar b. Population preventable fraction of bicycle related head injuries. Injury Prevention 2000;6:235-238.



